

Remarks and Arguments

The Claim Amendments

Claim 1 has been amended to more clearly define the subject matter which Applicants regard as the invention and to correct a typographical error. Claim 4 has been canceled. Support for the amendments to Claim 1 can be found throughout the specification.

The Rejection Under 35 U.S.C. §103(a)

The Examiner maintained his rejection of Claims 1-28 under 35 U.S.C. §103(a) as being unpatentable over Housley et al. (US 2001/0007910) in view of Lewis et al. (U.S. Patent No. 3,406,196). Applicants respectfully traverse the Examiner's rejection.

On March 18, 2008, a telephone interview was conducted between the undersigned, Kelly Cummings, Applicants Frank Belmonte, Allen Mossman and David Sikkenga, and Examiner Taylor Oh. The interview was requested by Applicants for the purpose of discussing the rejection. Applicants thank the Examiner for his time and respectfully request allowance of the claims based on that discussion and the following remarks and arguments. If the Examiner is of the opinion that this interview summary record is inaccurate in any way, he is respectfully requested to contact Applicants' attorney so that any correction may be addressed.

During the telephone interview, Applicants reiterated several arguments set forth in their previous Amendments and Responses to the Office Actions. In addition, Applicants explained how the process of the present invention improves oxygen utilization when the concentration of residual oxygen in the gas removed from the first oxygen stage is from about 0.3 to about 2 volume percent, without reducing the high quality of the dicarboxylic acid products produced. Furthermore, as a result of the improved oxygen utilization, Applicants' invention offers economic advantages by improving process efficiency and increasing the rated capacity of a commercial oxidation system while eliminating the need for additional compressor capacity. None of the prior art references teach or suggest a continuous staged countercurrent process for the catalytic oxidation of disubstituted benzene having oxidizable substituents that

maximizes oxygen utilization, while maintaining the high quality of the dicarboxylic acid products produced.

Also discussed was the fact that Lewis et al. disclose a process which calls for the use of water as a solvent or no solvent at all in the first oxidation stage and the use of water as a solvent in the second oxidation stage. However, it is extremely difficult, if not impossible, to make a high quality dicarboxylic acid product when water is used as the solvent or when no solvent is used at all. Lewis et al. neither teach nor suggest Applicants' inventive process which utilizes a solvent comprising an organic acid to produce high quality dicarboxylic acid products. In fact, in column 3, lines 25-26, Lewis et al. call for an oxidation process "whereby a need for foreign organic liquid reaction medium is entirely avoided."

At the conclusion of the telephone interview, an agreement was reached with respect to the claim amendments made herein. The Examiner indicated that such amendments would be sufficient to overcome his rejections and that the claims, as amended, would be allowable.

Conclusion


The Applicants respectfully request that the Examiner consider the foregoing arguments and amendments. Applicants submit that the subject claims are now in condition for allowance and respectfully request allowance of these claims.

If the Examiner again rejects these claims, he is respectfully requested to call Applicants' attorney before issuing the rejection so that the patentable nature of the invention may be further discussed.

March 19, 2008

Respectfully submitted,

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